CRF Errors Edited by the STIC Systems Branch

Serial Number: __09/781,712 B__   CRF Edit Date: __3/22/04__
                                         Edited by: __ΩU__

ENTERED

____ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

____ Corrected the SEQ ID NO. Sequence numbers edited were:

_____

____ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

_____

__/__ Deleted: __/__ invalid beginning/end-of-file text ; ____ page numbers

____ Inserted mandatory headings/numeric identifiers, specifically:

_____

____ Moved responses to same line as heading/numeric identifier, specifically:

_____

____ Other:

_____
_____
_____

1600

RAW SEQUENCE LISTING
PATENT APPLICATION: **US/09/781,712B**

DATE: 03/22/2004
TIME: 11:06:14

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\03222004\I781712B.raw**

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 3 <110> APPLICANT: Crooke, Stanley T
 4         Lima, Walter
 5         Wu, Hongjiang
 7 <120> TITLE OF INVENTION: Methods of Using Mammalian RNase H and
Compositions Thereof
 9 <130> FILE REFERENCE: ISPH-0520
11 <140> CURRENT APPLICATION NUMBER: US 09/781,712B
12 <141> CURRENT FILING DATE: 2001-02-12
14 <150> PRIOR APPLICATION NUMBER: US 60/067,458
15 <151> PRIOR FILING DATE: 1997-12-04
17 <150> PRIOR APPLICATION NUMBER: US 09/203,716
18 <151> PRIOR FILING DATE: 1998-12-02
20 <150> PRIOR APPLICATION NUMBER: US 09/343,809
21 <151> PRIOR FILING DATE: 1999-06-30
23 <150> PRIOR APPLICATION NUMBER: US 09/684,254
24 <151> PRIOR FILING DATE: 2000-10-06
26 <160> NUMBER OF SEQ ID NOS: 39
28 <170> SOFTWARE: PatentIn version 3.1
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32 <212> TYPE: PRT
33 <213> ORGANISM: Homo sapien
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42           20                  25                  30
45 Val Asp Glu Ala Gly Arg Gly Pro Val Leu Gly Pro Met Val Tyr Ala
46           35                  40                  45
49 Ile Cys Tyr Cys Pro Leu Pro Arg Leu Ala Asp Leu Glu Ala Leu Leu
50      50                  55                  60
53 Val Ala Asp Ser Leu Thr Leu Leu Glu Ser Glu Arg Glu Arg Leu Phe
54 65                  70                  75                  80
57 Ala Leu Met Glu Asp Thr Asp Phe Val Gly Trp Ala Leu Asp Val Leu
58                85                  90                  95
61 Ser Pro Asn Leu Ile Ser Thr Ser Met Leu Gly Trp Val Leu Tyr Asn
62                100                 105                 110
65 Leu Asn Ser Leu Ser His Asp Thr Ala Thr Gly Leu Ile Gln Tyr Ala
66           115                 120                 125
69 Leu Asp Gln Gly Val Asn Val Thr Gln Val Phe Val Asp Thr Val Gly
70      130                 135                 140
73 Met Pro Glu Thr Tyr Gln Ala Arg Leu Gln Gln Ser Phe Pro Gly Ile
74 145                 150                 155                 160
77 Glu Val Thr Val Leu Ala Leu Ala Asp Ala Leu Tyr Pro Val Val Ser
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82             180                  185                  190
85 Trp Gln Phe Val Glu Leu Leu Gln Asp Leu Asp Thr Asp Tyr Gly Ser
86         195                  200                  205
89 Gly Tyr Pro Asn Asp Pro Leu Thr Leu Ala Trp Leu Leu Glu His Val
90     210                  215                  220
93 Glu Pro Val Phe Gly Phe Pro Gln Phe Val Arg Phe Ser Trp Arg Thr
94 225                  230                  235                  240
97 Ala Gln Thr Ile Leu Glu Leu Glu Ala Glu Asp Val Ile Trp Glu Asp
98             245                  250                  255
101 Ser Ala Ser Glu Asn Gln Glu Gly Leu Arg Leu Ile Thr Ser Tyr Phe
102             260                  265                  270
105 Leu Asn Glu Gly Ser Gln Ala Arg Pro Arg Ser Ser His Arg Tyr Phe
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109 Leu Glu Arg Gly Leu Glu Ser Ala Thr Ser Leu
110     290                  295
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115 <212> TYPE: PRT
116 <213> ORGANISM: Mus sp.
118 <400> SEQUENCE: 2
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124 Ser Ser Pro Val Pro Ala Val Cys Leu Leu Glu Pro Cys Val Leu Gly
125             20                  25                  30
128 Val Asp Glu Ala Gly Arg Gly Pro Val Leu Gly Pro Met Val Tyr Ala
129         35                  40                  45
132 Ile Cys Tyr Cys Pro Leu Ser Arg Leu Ala Asp Leu Glu Ala Leu Leu
133     50                  55                  60
136 Val Ala Asp Ser Leu Thr Leu Thr Glu Asn Glu Arg Glu Arg Leu Phe
137 65                  70                  75                  80
140 Ala Leu Met Glu Glu Asp Gly Asp Phe Val Gly Trp Ala Leu Asp Val
141             85                  90                  95
144 Leu Ser Pro Asn Leu Ile Ser Thr Ser Met Leu Gly Arg Val Leu Tyr
145         100                  105                  110
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149         115                  120                  125
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153 <211> LENGTH: 307
154 <212> TYPE: PRT
155 <213> ORGANISM: Caenorhabditis elegans
157 <400> SEQUENCE: 3
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160 1             5                  10                  15
163 Thr Glu Arg Ser Leu Thr Trp Asn Asn Phe Gly Asn Gly Ile Pro Cys
164         20                  25                  30
167 Val Leu Gly Ile Asp Glu Ala Gly Arg Gly Pro Val Leu Gly Pro Met
168         35                  40                  45
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171 Val Tyr Ala Ala Ala Ile Ser Pro Leu Asp Gln Asn Val Glu Leu Leu
172     50              55              60
175 Asn Leu Gly Val Asp Asp Ser Leu Ala Leu Asn Glu Ala Leu Arg Glu
176 65              70              75              80
179 Glu Ile Phe Asn Leu Met Asn Glu Asp Glu Asp Ile Gln Gln Ile Ile
180             85              90                  95
183 Ala Tyr Ala Leu Arg Cys Leu Ser Pro Glu Leu Ile Ser Cys Ser Met
184         100             105             110
187 Leu Leu Arg Gln Leu Tyr Ser Leu Asn Glu Val Ser His Glu Ala Ala
188         115             120             125
191 Ile Thr Leu Ile Arg Asp Ala Leu Ala Cys Asn Val Asn Val Val Glu
192     130             135             140
195 Ile Leu Val Asp Thr Val Gly Pro Leu Ala Thr Tyr Gln Ala Leu Leu
196 145             150             155             160
199 Glu Leu Leu Phe Pro Gly Ile Ser Ile Cys Val Thr Glu Leu Ala Asp
200             165             170             175
203 Ser Leu Phe Pro Ile Val Ser Ala Ala Ser Ile Ala Ala Leu Val Thr
204             180             185             190
207 Arg Asp Ser Arg Leu Arg Asn Trp Gln Phe Arg Glu Leu Asn Ile Leu
208         195             200             205
211 Val Pro Asp Ala Gly Tyr Gly Ser Gly Tyr Pro Gly Asp Pro Asn Thr
212     210             215             220
215 Leu Leu Phe Leu Gln Leu Ser Val Glu Pro Val Phe Gly Phe Cys Ser
216 225             230             235             240
219 Leu Val Arg Ser Ser Trp Leu Thr Ala Ser Thr Ile Val Glu Leu Arg
220         245             250             255
223 Cys Val Pro Gly Ser Trp Glu Asp Asp Glu Glu Glu Gly Leu Ser Gln
224         260             265             270
227 Ser Leu Arg Met Thr Ser Trp Met Val Pro Leu Asn Glu Thr Glu Val
228         275             280             285
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232     290             295             300
235 Leu Phe Leu
236 305
239 <210> SEQ ID NO: 4
240 <211> LENGTH: 307
241 <212> TYPE: PRT
242 <213> ORGANISM: Saccharomyces cerevisiae
244 <400> SEQUENCE: 4
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250 Ser Tyr Phe Ser Pro Val Pro Ser Ala Leu Leu Glu Gln Asn Asp Ser
251         20              25              30
254 Pro Ile Ile Met Gly Ile Asp Glu Ala Gly Arg Gly Pro Val Leu Gly
255         35              40              45
258 Pro Met Val Tyr Ala Val Ala Tyr Ser Thr Gln Leu Tyr Gln Asp Glu
259     50              55              60
262 Thr Ile Ile Pro Asn Tyr Glu Phe Asp Asp Ser Leu Leu Leu Thr Asp
263 65              70              75              80
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266 Pro Ile Arg Arg Met Leu Phe Ser Leu Ile Tyr Gln Asp Asn Glu Glu
267             85              90              95
270 Leu Thr Gln Ile Gly Tyr Ala Thr Thr Cys Ile Thr Pro Leu Asp Ile
271            100             105             110
274 Ser Arg Gly Met Ser Leu Phe Pro Pro Thr Arg Asn Tyr Asn Leu Asn
275         115             120             125
278 Glu Gln Ala His Asp Val Thr Met Ala Leu Ile Asp Gly Val Ile Leu
279      130             135             140
282 Gln Asn Val Leu Leu Ser His Val Tyr Val Asp Thr Val Gly Pro Pro
283 145             150             155             160
286 Ala Ser Tyr Gln Leu Leu Leu Glu Gln Arg Phe Pro Gly Val Leu Phe
287             165             170             175
290 Thr Val Ala Leu Leu Ala Asp Ser Leu Tyr Cys Met Val Ser Val Ala
291            180             185             190
294 Ser Val Val Ala Leu Val Thr Arg Asp Ile Leu Val Glu Ser Leu Leu
295         195             200             205
298 Arg Asp Pro Asp Glu Ile Leu Gly Ser Gly Tyr Pro Ser Asp Pro Leu
299      210             215             220
302 Thr Val Ala Trp Leu Leu Arg Asn Gln Thr Ser Leu Met Gly Trp Pro
303 225             230             235             240
306 Ala Asn Met Val Arg Phe Ser Trp Gln Thr Cys Gln Thr Leu Leu Asp
307             245             250             255
310 Asp Ala Ser Leu Asn Ser Ile Pro Ile Leu Trp Glu Glu Gln Tyr Met
311             260             265             270
314 Asp Ser Arg Leu Asn Ala Ala Gln Leu Thr Leu Gln Leu Gln Leu Gln
315         275             280             285
318 Met Val Ala Leu Pro Val Arg Arg Leu Arg Leu Arg Thr Leu Asp Asn
319      290             295             300
322 Trp Tyr Arg
323 305
326 <210> SEQ ID NO: 5
327 <211> LENGTH: 198
328 <212> TYPE: PRT
329 <213> ORGANISM: Escherichia coli
331 <400> SEQUENCE: 5
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338             20              25              30
341 Ile Leu Asp Pro Ala Arg Pro Ile Ala Gly Leu Asn Asp Ser Leu Leu
342         35              40              45
345 Leu Ser Glu Leu Arg Arg Leu Ala Leu Tyr Glu Glu Ile Leu Glu Leu
346      50              55              60
349 Ala Leu Ser Trp Ser Leu Gly Arg Ala Glu Pro His Glu Ile Asp Glu
350 65              70              75              80
353 Leu Asn Ile Leu His Ala Thr Met Leu Ala Met Gln Arg Ala Val Ala
354             85              90              95
357 Gly Leu His Ile Ala Pro Glu Tyr Val Leu Ile Asp Gly Asn Arg Cys
358             100             105             110
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362         115             120             125
365 Val Pro Glu Ile Ser Ala Ala Ser Ile Leu Ala Leu Val Thr Arg Asp
366         130             135             140
369 Ala Glu Met Ala Ala Leu Asp Ile Val Phe Pro Gln Tyr Gly Phe Ala
370 145             150             155             160
373 Gln His Leu Gly Tyr Pro Thr Ala Phe His Leu Glu Leu Leu Ala Glu
374             165             170             175
377 His Gly Ala Thr Glu His His Arg Arg Ser Phe Gly Pro Val Leu Arg
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385 <210> SEQ ID NO: 6
386 <211> LENGTH: 286
387 <212> TYPE: PRT
388 <213> ORGANISM: Homo sapiens
390 <400> SEQUENCE: 6
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397             20              25              30
400 Arg Gly Arg Leu Thr Gly Val Phe Leu Thr Trp Asn Glu Cys Arg Ala
401         35              40              45
404 Gln Val Asp Arg Phe Pro Ala Ala Arg Phe Leu Leu Phe Ala Thr Glu
405     50              55              60
408 Asp Glu Ala Trp Ala Phe Val Arg Leu Ser Ala Ser Pro Glu Val Ser
409 65              70              75              80
412 Glu Gly His Glu Asn Gln His Gly Gln Glu Ser Glu Ala Leu Pro Gly
413             85              90              95
416 Leu Arg Leu Arg Glu Pro Leu Asp Gly Asp Gly His Glu Ser Ala Gln
417             100             105             110
420 Pro Tyr Ala Leu His Met Leu Pro Ser Val Glu Pro Ala Pro Pro Val
421         115             120             125
424 Ser Arg Asp Thr Phe Ser Tyr Met Gly Asp Phe Val Val Val Tyr Thr
425         130             135             140
428 Asp Gly Cys Cys Ser Ser Asn Gly Arg Arg Leu Pro Arg Ala Gly Ile
429 145             150             155             160
432 Gly Val Tyr Trp Gly Pro Gly His Pro Leu Asn Val Gly Ile Arg Leu
433             165             170             175
436 Pro Gly Arg Gln Thr Asn Gln Arg Ala Glu Ile His Ala Ala Cys Leu
437             180             185             190
440 Ala Ile Glu Gln Ala Leu Thr Gln Asn Ile Asn Leu Leu Val Leu Tyr
441             195             200             205
444 Thr Asp Ser Met Phe Thr Ile Asn Gly Ile Thr Asn Trp Val Gln Gly
445         210             215             220
448 Trp Leu Leu Asn Gly Trp Leu Thr Ser Ala Gly Leu Glu Val Ile Asn
449 225             230             235             240
452 Leu Glu Asp Phe Val Ala Leu Glu Arg Leu Thr Gln Gly Met Asp Ile
453             245             250             255
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VERIFICATION SUMMARY
PATENT APPLICATION: **US/09/781,712B**

DATE: 03/22/2004
TIME: 11:06:15

Input Set : **A:\PTO.AMC.txt**
Output Set: **N:\CRF4\03222004\I781712B.raw**

1600

RAW SEQUENCE LISTING   DATE: 03/17/2004
PATENT APPLICATION: **US/09/781,712B**   TIME: 15:48:04

Input Set : **A:\ISPH-520.ST25.txt**
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 3 <110> APPLICANT: Crooke, Stanley T
 4         Lima, Walter
 5         Wu, Hongjiang
 7 <120> TITLE OF INVENTION: Methods of Using Mammalian RNase H and Compositions Thereof
 9 <130> FILE REFERENCE: ISPH-0520
11 <140> CURRENT APPLICATION NUMBER: US 09/781,712B
12 <141> CURRENT FILING DATE: 2001-02-12
14 <150> PRIOR APPLICATION NUMBER: US 60/067,458
15 <151> PRIOR FILING DATE: 1997-12-04
17 <150> PRIOR APPLICATION NUMBER: US 09/203,716
18 <151> PRIOR FILING DATE: 1998-12-02
20 <150> PRIOR APPLICATION NUMBER: US 09/343,809
21 <151> PRIOR FILING DATE: 1999-06-30
23 <150> PRIOR APPLICATION NUMBER: US 09/684,254
24 <151> PRIOR FILING DATE: 2000-10-06
26 <160> NUMBER OF SEQ ID NOS: 39
28 <170> SOFTWARE: PatentIn version 3.1
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Does Not Comply
Corrected Diskette Needed

ERRORED SEQUENCES

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1222 <212> TYPE: DNA
1223 <213> ORGANISM: Artificial sequence
1225 <220> FEATURE:
1226 <223> OTHER INFORMATION: Synthetic
1228 <400> SEQUENCE: 39
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E--> 1233 (21)
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VERIFICATION SUMMARY   DATE: 03/17/2004
PATENT APPLICATION: **US/09/781,712B**   TIME: 15:48:05

Input Set : **A:\ISPH-520.ST25.txt**
Output Set: **N:\CRF4\03172004\I781712B.raw**

L:1233 M:254 E: No. of Bases conflict, this line has no nucleotides.